

## Claims

1. Method for monitoring at least one measuring signal, in particular for use in automation technology, in which method  
5 a computer system cyclically determines a characteristic value (4) of the measuring signal in measuring periods (8) which are separated from one another by a time interval (9), whereby
- a priority (P1...P15) is defined automatically,
  - 10 - said priority (P1...P15) is assigned to the measuring signal and
  - the time interval (9) between the measuring periods (8) is specified as a function of the priority (P1...P15).
- 15 2. Method according to Claim 1, wherein the priority (P1...P15) is defined automatically as a function of the characteristic value (4) of the measuring signal.
- 20 3. Method according to Claim 1 or 2, wherein the priority (P1...P15) is defined automatically as a function of the size of the difference in the characteristic  
25 values (4) of the measuring signal which were determined in two successive measuring periods (8).
4. Method according to one of the preceding claims, wherein  
30 the priority (P1...P15) is defined automatically as a function of a trend analysis performed by the computer system of the characteristic values (4) of the measuring signal which were determined in successive measuring periods (8).
- 35 5. Method according to one of the preceding claims, wherein

the measuring periods (8) are embodied as discrete sampling instants and the characteristic values (4) of the measuring signal are embodied as momentary values of the measuring signal.